Amendments to the claims are presented herein by presenting a complete set of pending claims, as amended, in clean form. Also, an Appendix entitled "Version With Markings to Show Changes Made," showing the current amendments to the claims is attached hereto.

Please amend the above-identified application as follows:

IN THE CLAIMS:

Please replace the previous version of the claims with the following clean version, wherein claims 1, 3, 4, 6-9, 11, 13, and 14 incorporate new amendments thereto, and claims 16-24 have been added.

B1 cont.

1. (Twice Amended) An actuator comprising:

a displacement element for generating a specific displacement;

a displacement expander for transmitting the displacement of said displacement element and expanding the displacement;

a transmitter for transmitting the displacement expanded by said displacement expander to a driven member;

a presser for pressing said transmitter against the driven member; and

a driver for driving the displacement element by providing a drive signal that oscillates the displacement element at a first phase angle and oscillates the displacement expander at a second phase angle substantially supplementary to said first phase angle, thereby causing oscillations of said displacement element to be restrained by oscillations of said displacement expander.

2. An actuator as claimed in claim 1, wherein the spring constant of said displacement expander is less than the spring constant of said displacement element.

3. (Once Amended) An actuator as claimed in claim 2, wherein said displacement element is driven by the drive signal, wherein the drive signal has a frequency near the simple natural frequency of said displacement expander, and wherein said simple natural frequency of the displacement expander is different than the simple natural frequency of the displacement element.

4. (Once Amended) An actuator as claimed in claim 1, wherein said displacement element is driven by the drive signal, wherein the drive signal has a frequency near the simple natural frequency of said displacement expander, and wherein said simple natural frequency of the displacement expander is different than the simple natural frequency of the displacement element.

5. An actuator as claimed in claim 1, wherein said displacement element is a laminate-type piezoelectric element.

B1 Cont.

6. (Twice Amended) An actuator comprising:

a first displacement element for generating a specific displacement;

a second displacement element for generating a specific displacement of which a direction is cross to a direction of the specific displacement of said first displacement element;

a first displacement expander, which is connected in series to said first displacement element, for transmitting the displacement of said first displacement element and expanding the displacement;

a second displacement expander, which is connected in series to said second displacement element, for transmitting the displacement of said second displacement element and expanding the displacement;

a tip member, which is arranged at an intersection end of said first and second displacement elements, for transmitting the displacement expanded by said first and second displacement expanders to a driven member;

a presser for pressing said tip against the driven member; and

a driver for driving each of said first and second displacement elements by providing a first drive signal that oscillates the first displacement element at a first phase angle and oscillates the first displacement expander at a second phase angle substantially supplementary to said first phase angle, and by providing a second drive signal that oscillates the second displacement element at a third phase angle and oscillates the second displacement expander at a fourth phase angle substantially supplementary to said third phase angle, thereby causing oscillations of said first and second displacement elements to be restrained by oscillations of said first and second displacement expanders.

7. (Twice Amended) An actuator as claimed in claim 6, wherein the spring constants of said first and second displacement expanders are respectively less than the spring constants of said first and second displacement elements.

8. (Once Amended) An actuator as claimed in claim 7, wherein said first and second displacement elements are respectively driven by said first and second drive signals, wherein each of said first and second drive signals has a frequency near the simple

B1 cont.

natural frequency of said first and second displacement expanders, respectively, and wherein the simple natural frequency of the first displacement expander is different than the simple natural frequency of the first displacement element and the simple natural frequency of the second displacement expander is different than the simple natural frequency of the second displacement element.

9. (Once Amended) An actuator as claimed in claim 6, wherein said first and second displacement elements are respectively driven by said first and second drive signals, wherein each of said first and second drive signals has a frequency near the simple natural frequency of said first and second displacement expanders, respectively, and wherein the simple natural frequency of the first displacement expander is different than the simple natural frequency of the first displacement element and the simple natural frequency of the second displacement expander is different than the simple natural frequency of the second displacement element.

10. An actuator as claimed in claim 6, wherein said first and second displacement elements are respectively laminate-type piezoelectric elements.

11. (Once Amended) An actuator comprising:

a displacement element for generating a specific displacement;

a displacement expander for transmitting the displacement of said displacement element and expanding the displacement, said displacement expander having elasticity in the direction of said displacement;

a transmitter for transmitting the displacement expanded by said displacement expander to a driven member;

a presser for pressing said transmitter against the driven member; and

a driver for driving said displacement element,

wherein the driver includes an oscillator for providing a drive signal that oscillates the displacement element at a first phase angle and oscillates the displacement expander at a second phase angle substantially supplementary to said first phase angle, thereby causing

said specific displacement of said displacement element to be restrained by contractions or expansions of said displacement expander.

B' cancel.

12. An actuator as claimed in claim 11, wherein the spring constant of said displacement expander is less than the spring constant of said displacement element.

13. (Once Amended) An actuator as claimed in claim 12, wherein said displacement element is driven by the drive signal, wherein the drive signal has a frequency near the simple natural frequency of said displacement expander, and wherein said simple natural frequency of the displacement expander is different than the simple natural frequency of the displacement element.

14. (Once Amended) An actuator as claimed in claim 11, wherein said displacement element is driven by the drive signal, wherein the drive signal has a frequency near the simple natural frequency of said displacement expander, and wherein said simple natural frequency of the displacement expander is different than the simple natural frequency of the displacement element.

15. An actuator as claimed in claim 11, wherein said displacement element is a laminate-type piezoelectric element.

B2 cont.

16. (New) An actuator as claimed in claim 1, wherein the drive signal has a driving frequency based on at least one physical property of the displacement expander.

17. (New) An actuator as claimed in claim 16, wherein said at least one physical property includes at least one of a mass of the displacement expander and a spring constant of the displacement expander.

18. (New) An actuator as claimed in claim 17, wherein the driving frequency satisfies the relationship:

$f = (k/m)^{1/2}$

wherein f is the driving frequency, k is the spring constant of the displacement expander, and m is the mass of the displacement expander.

B2 cmd.

19. (New) An actuator as claimed in claim 6, wherein the first drive signal has a first driving frequency based on at least one physical property of the first displacement expander, and wherein the second drive signal has a second driving frequency based on at least one physical property of the second displacement expander.

20. (New) An actuator as claimed in claim 19, wherein each said at least one physical property includes at least one of a mass of the respective displacement expander and a spring constant of the respective displacement expander.

21. (New) An actuator as claimed in claim 20, wherein the each of the first and second driving frequencies satisfies the relationship:

$f = (k/m)^{1/2}$

wherein f is the respective driving frequency, k is the spring constant of the respective displacement expander, and m is the mass of the respective displacement expander.

22. (New) An actuator as claimed in claim 11, wherein the drive signal has a driving frequency based on at least one physical property of the displacement expander.

23. (New) An actuator as claimed in claim 22, wherein said at least one physical property includes at least one of a mass of the displacement expander and a spring constant of the displacement expander.

24. (New) An actuator as claimed in claim 23, wherein the driving frequency satisfies the relationship:

$f = (k/m)^{1/2}$

wherein f is the driving frequency, k is the spring constant of the displacement expander, and m is the mass of the displacement expander.